Index

ORIGINAL PAPERS

Alexander, N. D. E. *see* **Brown, D.**
Barnett, S. *see* **Greenstreet, S. P. R.**
Basford, D. J. *see* **Hall, S. J.**
Bechara, J. A., Moreau, G. & Hare, L. The impact of brook trout (*Salvelinus fontinalis*) on an experimental stream benthic community: the role of spatial and size refugia, 451
Bentil, D. E. & Murray, J. D. Modelling bovine tuberculosis in badgers, 239
Bijnens, L. *see* **Wauters, L.**
Black, R. *see* **Peterson, C. H.**
Blackburn, T. M., Brown, V. K., Doube, B. M., Greenwood, J. J. D., Lawton, J. H. & Stork, N. E. The relationship between abundance and body size in natural animal assemblages, 519
Blackburn, T. M., Lawton, J. H. & Pimm, S. L. Non-metabolic explanations for the relationship between body size and animal abundance, 694
Boisaubert, B. *see* **Gaillard, J.-M.**
Borgemeister, C. *see* **Holler, C.**
Boutin, J.-M. *see* **Gaillard, J.-M.**
Boutin, S. & Larsen, K. W. Does food availability affect growth and survival of males and females differently in a promiscuous small mammal, *Tamiasciurus hudsonicus?* 364
Bremnes, T. *see* **Heggenes, J.**
Brinkhof, M. W. G., Cave, A. J., Hage, F. J. & Verhulst, S. Timing of reproduction and fledgling success in the coot *Fulica atra*: evidence for a causal relationship, 577
Broekhuizen, N., Evans, H. F. & Hassell, M. P. Site characteristics and the population dynamics of the pine looper moth, 511
Brown, D. *see* **Murray, M. G.**
Brown, D., Alexander, N. D. E. & Marrs, R. W. Structural accounting of the variance of demographic change, 490
Brown, V. K. *see* **Blackburn, T. M.**
Casas, J., Gurney, W. S. C., Nisbet, R. & Roux, O. A probabilistic model for the functional response of a parasitoid at the behavioural time-scale, 194
Cash, K. J., McKee, M. H. & Wrona, F. J. Short- and long-term consequences of grouping and group foraging in the free-living flatworm *Dugesia tigurina*, 529
Cave, A. J. *see* **Brinkhof, M. W. G.**
Christe, P. *see* **Richner, H.**
Cohen, J. E., Pimm, S. L., Yodzis, P. & Saldana, J. Body sizes of animal predators and animal prey in food webs, 67
Cooch, E. G. *see* **Rockwell, R. F.**
Cooch, E. G. *see* **Williams, T. D.**
Cooke, F. *see* **Rockwell, R. F.**
Cooke, F. *see* **Williams, T. D.**
Cornell, H. V. *see* **Marino, P. C.**
Creson, C. *see* **Drake, J. A.**
Crick, H. Q. P., Gibbons, D. W. & Magrath, R. D. Seasonal changes in clutch size in British birds, 263
Croy, M. I. *see* **Hughes, R. N.**
Delorme, D. *see* **Gaillard, J.-M.**
Denton, J. *see* **Griffiths, R. A.**
Dhondt, A. A. *see* **Wauters, L.**
Dick, J. T. A., Montgomery, I. & Elwood, R. W. Replacement of the indigenous amphipod *Gammarus duebeni celticus* by the introduced *G. pulex*: differential cannibalism and mutual predation, 79
Dit Durell, S. E. A. Le V., Goss-Custard, J. D. & Caldow, R. W. G. Sex-related differences in diet and feeding method in the oystercatcher *Haematopus ostralegus*, 205
Dixon, A. F. G., Horth, S. & Kindlmann, P. Migration in insects: cost and strategies, 182
Dork, J. G. *see* **Heggenes, J.**
Doube, B. M. *see* **Blackburn, T. M.**
Drake, J. A., Flum, T. E., Witteman, G. J., Voskuil, T., Hoylman, A. M., Creson, C., Kenny, D. A., Huxel, G. R., Larue, C. S. & Duncan, J. R. The construction and assembly of an ecological landscape, 117
Driessen, G. *see* **Hemerik, L.**
Duncan, J. R. *see* **Drake, J. A.**
Dwyer, G. & Elkinton, J. S. Using simple models to predict virus epizootics in gypsy moth populations, 1
Elkinton, J. S. *see* **Dwyer, G.**
Elliott, J. M. The self-thinning rule applied to juvenile sea-trout, *Salmo trutta*, 371
Elwood, R. W. *see* **Dick, J. T. A.**
English-Loeb, G. M., Brody, A. K. & Karban, R. Host-plant-mediated interactions between a generalist folivore and its tachinid parasitoid, 465
Evans, H. F. *see* **Broekhuizen, N.**
Everson, I. *see* **Veit, R. R.**
Flum, T. E. *see* **Drake, J. A.**
Forsman, A. Survival in relation to body size and growth rate in the adder, *Vipera berus*, 647
Fryer, R. *see* **Hall, S. J.**
Gaillard, J.-M., Delorme, D., Boutin, J.-M., Van Laere, G., Boisaubert, B. & Pradel, R. Roe deer survival patterns: a comparative analysis of contrasting populations, 778
Gatehouse, A. G. *see* **Wilson, K.**
Gibbons, D. W. *see* **Crick, H. Q. P.**
Gibbons, J. W. *see* **Semlitsch, R. D.**
Goss-Custard, J. D. *see* **McGrorty, S.**
Greenstreet, S. P. R., Morgan, R. I. G., Barnett, S. & Redhead, P. Variation in the number of shags *Phalacrocorax aristotelis* and common seals *Phoca vitulina* near the mouth of an Atlantic salmon *Salmo salar* river at the time of the smolt run, 565
Greenwood, J. J. D. *see* **Blackburn, T. M.**

Griffiths, R. A., Denton, J. & Wong, A. L.-C. The effect of food level on competition in tadpoles: interference mediated by protothecan algae?, 274
Gurney, W. S. C. *see* **Casas, J.**
Haardt, H. *see* **Holler, C.**
Haccou, P. *see* **Hemerik, L.**
Hage, F. J. *see* **Brinkhof, M. W. G.**
Hall, S. J., Robertson, M. R., Basford, D. J. & Fryer, R. Pit-digging by the crab *Cancer pagurus*: a test for long-term, large-scale effects on infaunal community structure, 59
Hamer, K. C. & Hill, J. K. Variation and regulation of meal size and feeding frequency in Cory's shearwater *Calonectris diomedea*, 441
Hanski, I. & Woiwod, I. P. Spatial synchrony in the dynamics of moth and aphid populations, 656
Hare, L. *see* **Bechara, J. A.**
Hassell, M. P. *see* **Broekhuizen, N.**
Hassell, M. P. *see* **Holt, R. D.**
Hassell, M. P. *see* **Jones, T. H.**
Haukisalmi, V. & Henttonen, H. Coexistence in helminths of the bank vole *Clethrionomys glareolus*. I. Patterns of co-occurrence, 221
Haukisalmi, V. & Henttonen, H. Coexistence in helminths of the bank vole *Clethrionomys glareolus*. II. Intestinal distribution and interspecific interactions, 230
Heggenes, J., Krog, O. M. W., Lindas, O. R., Dork, J. G. & Bremnes, T. Homeostatic behavioural responses in a changing environment: brown trout (*Salmo trutta*) become nocturnal during winter, 295
Heim, M. *see* **Saether, B.-E.**
Hemerik, L., Driessen, G. & Haccou, P. Effects of intra-patch experiences on patch time, search time and searching efficiency of the parasitoid *Leptopilina clavipes*, 33
Henttonen, H. *see* **Haukisalmi, V.**
Hill, J. K., *see* **Hamer, K. C.**
Holler, C., Borgemeister, C., Haardt, H. & Powell, W. The relationship between primary parasitoids and hyperparasitoids of cereal aphids: an analysis of field data, 12
Holt, R. D. & Hassell, M. P. Environmental heterogeneity and the stability of host-parasitoid interactions, 89
Horth, S. *see* **Dixon, A. F. G.**
Horwood, J. Comment: population variance and deterministic stability analysis, 588
Houston, D. & Shine, R. Sexual dimorphism and niche divergence: feeding habits of the Arafura filesnake, 737
Hoylman, A. M. *see* **Drake, J. A.**
Hughes, R. N. & Croy, M. I. An experimental analysis of frequency-dependent predation (switching) in the 15-spined stickleback, *Spinachia spinachia*, 341
Huxel, G. R. *see* **Drake, J. A.**
Jefferies, R. L. *see* **Williams, T. D.**
Jones, T. H., Hassell, M. P. & Pacala, S. W. Spatial heterogeneity and the population dynamics of a host-parasitoid system, 251
Jones, T. M. *see* **Thomas, C. D.**
Jonsson, B. *see* **L'Abbe-Lund, J. H.**
Kahn, D. H. *see* **Marino, P. C.**
Kato, A. *see* **Watanuki, Y.**
Kenny, D. A. *see* **Drake, J. A.**
Kermott, L. *see* **Scott Johnson, L.**
Kindlmann, P. *see* **Dixon, A. F. G.**
Korpimäki, E. Does nest-hole quality, poor breeding success or food depletion drive the breeding dispersal of Tengmalm's owls, 606
Krebs, C. J. *see* **Lambin, X.**
Krog, O. M. W. *see* **Heggenes, J.**
Kruuk, H. *see* **Nolet, B. A.**
L'Abbe-Lund, J. H., Langeland, A., Jonsson, B. & Ugedal, O. Spatial segregation by age and size in Arctic charr: a trade-off between feeding possibility and risk of predation, 160
Lambin, X. & Krebs, C. J. Influence of female relatedness on the demography of Townsend's vole populations in spring, 536
Langeland, A. *see* **L'Abbe-Lund, J. H.**
Larsen, K. W. *see* **Boutin, S.**
Larue, C. S. *see* **Drake, J. A.**
Lawler, S. P. Species richness, species composition and population dynamics of protists in experimental microcosms, 711
Lawton, J. H. *see* **Blackburn, T. M.**
Lein, M. R. *see* **Scott Johnson, L.**
Lindås, O. R. *see* **Heggenes, J.**
Lubin, Y. *see* **Ward, D.**
Luh, H-K. & Pimm, S. L. The assembly of ecological communities: a minimalist approach, 749
McGrorty, S. & Goss-Custard, J. D. Population dynamics of the mussel *Mytilus edulis* along environmental gradients: spatial variations in density-dependent mortalities, 415
McKee, M. H. *see* **Cash, K. J.**
Magrath, R. D. *see* **Crick, H. Q. P.**
Mahdi, T. & Whittaker, J. B. Do birch trees (*Betula pendula*) grow better if foraged by wood ants?, 101
Marino, P. C., Cornell, H. V. & Kahn, D. H. Environmental and clonal influences on host choice and larval survival in a leafmining insect, 503
Marrs, R. W. *see* **Brown, D.**
Mills, N. J. Species richness and structure in the parasitoid complexes of tortricoid hosts, 45
Møller, A. P. Ectoparasites increase the cost of reproduction in their hosts, 309
Montgomery, I. *see* **Dick, J. T. A.**
Moreau, G., *see* **Bechara, J. A.**
Morgan, R. I. G. *see* **Greenstreet, S. P. R.**
Mori, Y. *see* **Watanuki, Y.**
Murray, J. D. *see* **Bentil, D. E.**
Murray, M. G. & Brown, D. Niche separation of grazing ungulates in the Serengeti: an experimental test, 380

Naito, Y. *see* **Watanuki, Y.**

Nisbet, R. *see* **Casas, J.**

Nolet, B. A., Wansink, E. H. & Kruuk, H. Diving of otters (*Lutra lutra*) in a marine habitat: use of depths by a single-prey loader, 22

Norris, K. Seasonal variation in the reproductive success of blue tits: an experimental study, 287

Oppliger, A. *see* **Richner, H.**

Owen-Smith, N. Comparative mortality rates of male and female kudus: the costs of sexual size dimorphism, 428

Pacala, S. W. *see* **Jones, T. H.**

Pechmann, J. H. K. *see* **Semlitsch, R. D.**

Peterson, C. H. & Black, R. Experimental tests of the advantages and disadvantages of high density for two coexisting cockles in a Southern Ocean lagoon, 614

Pettifor, R. A. Brood-manipulation experiments. I. The number of offspring surviving per nest in blue tits (*Parus caeruleus*), 131

Pettifor, R. A. Brood-manipulation experiments. II. A cost of reproduction in blue tits (*Parus caeruleus*), 145

Pimm, S. L. *see* **Blackburn, T. M.**

Pimm, S. L. *see* **Cohen, J. E.**

Pimm, S. L. *see* **Luh, H-K.**

Powell, W. *see* **Holler, C.**

Pradel, R. *see* **Gaillard, J.-M.**

Redhead, P. *see* **Greenstreet, S. P. R.**

Richner, H., Oppliger, A. & Christe, P. Effect of an ectoparasite on reproduction in great tits, 703

Robertson, M. R. *see* **Hall, S. J.**

Rockwell, R. F., Cooch, E. G., Thompson, C. B. & Cooke, F. Age and reproductive success in female lesser snow geese: experience, senescence and the cost of philopatry, 323

Roux, O. *see* **Casas, J.**

Saether, B.-E. & Heim, M. Ecological correlates of individual variation in age at maturity in female moose (*Alces alces*): the effects of environmental variability, 482

Saldana, J. *see* **Cohen, J. E.**

Scott, D. E. *see* **Semlitsch, R. D.**

Scott Johnson, L., Kermott, L. & Lein, M. R. The cost of polygyny in the house wren *Troglodytes aedon*, 669

Semlitsch, R. D., Scott, D. E., Pechmann, J. H. K. & Gibbons, J. W. Phenotypic variation in the arrival time of breeding salamanders: individual repeatability and environmental influences, 334

Sevenster, J. G. & Van Alphen, J. J. M. A life history trade-off in *Drosophila* species and community structure in variable environments, 720

Shine, R. *see* **Houston, D.**

Shorrocks, B. Trends in the *Journal of Animal Ecology*: 1932–92, 599

Silverman, E. D. *see* **Veit, R. R.**

Slobodkin, L. B. G. E. Hutchinson: An Appreciation, 390

Solow, A. R. A simple test for change in community structure, 191

Spear, L. B. Dynamics and effect of western gulls feeding in a colony of guillemots and Brandt's cormorants, 399

Stork, N. E. *see* **Blackburn, T. M.**

Taylor, A. D. Comment: Population variance and stability: a response to Horwood, 592

Thomas, C. D. & Jones, T. M. Partial recovery of a skipper butterfly (*Hesperia comma*) from population refuges: lessons for conservation in a fragmented landscape, 472

Thompson, C. B. *see* **Rockwell, R. F.**

Tocque, K. The relationship between parasite burden and host resources in the desert toad (*Scaphiopus couchii*), under natural environmental conditions, 683

Ugedal, O. *see* **L'Abbe-Lund, J. H.**

Van Alphen, J. J. M. *see* **Sevenster, J. G.**

Van Laere, G. *see* **Gaillard, J.-M.**

Veit, R. R., Silverman, E. D. & Everson, I. Aggregation patterns of pelagic predators and their principal prey, Antarctic krill, near South Georgia, 551

Verhulst, S. *see* **Brinkhof, M. W. G.**

Voskuil, T. *see* **Drake, J. A.**

Wansink, E. H. *see* **Nolet, B. A.**

Ward, D. & Lubin, Y. Habitat selection and the life history of a desert spider, *Stegodyphus lineatus* (Eresidae), 353

Watanuki, Y., Kato, A., Mori, Y. & Naito, Y. Diving performance of adélie penguins in relation to food availability in fast sea-ice areas: comparison between years, 634

Wauters, L., Bijnens, L. & Dhondt, A. A. Body mass at weaning and juvenile recruitment in the red squirrel, 280

Whittaker, J. B. *see* **Mahdi, T.**

Williams, T. D., Cooch, E. G., Jefferies, R. L. & Cooke, F. Environmental degradation, food limitation and reproductive output: juvenile survival in lesser snow geese, 766

Wilson, K. & Gatehouse, A. G. Seasonal and geographical variation in the migratory potential of outbreak populations of the African armyworm moth, *Spodoptera exempta*, 169

Witteman, G. J. *see* **Drake, J. A.**

Woiwod, I. P. *see* **Hanski, I.**

Wong, A. L.-C. *see* **Griffiths, R. A.**

Wrona, F. J. *see* **Cash, K. J.**

Yodzis, P. *see* **Cohen, J. E.**

REVIEWS

Behrensmeyer, A. K., Damuth, J. D., Potts, R., Sues, H.-D. & Wing, S. L. *Terrestrial Ecosystems Through Time*, 594

Berry, R. J., Crawford, T. J. & Hewitt, G. M. (eds) *Genes in Ecology*, 792

Bertram, B. C. R. *The Ostrich Communal Nesting System*, 792

Burkhardt, F. & Smith, S. (eds) *The Correspondence of Charles Darwin*. Vol. 7, 1858–1859. Supplement to the Correspondence, 1821–1857, 216

Chapman, J. L. & Reiss, M. J. *Ecology: Principles and Applications*, 395

Cockburn, A. *An Introduction to Evolutionary Ecology*, 594

Crick, H. Q. P. & Jones, P. J. (eds) *The Ecology and Conservation of Palaearctic-African Migrants*, 395

Dolling, W. R. *The Hemiptera*, 395

Duncan, P. *Horses and Grasses*, 595

Foster, G. N. & Eyre, M. D. *Classification and Ranking of Water Beetle Communities*, 216

Glantz, M. H. (ed.) *Climate Variability, Climate Change, and Fisheries*, 793

Haila, Y. & Levins, R. *Humanity and Nature: Science and Society*, 217

Hanski, I. & Cambefort, Y. *Dung Beetle Ecology*, 396

Haynes, C. D., Ridpath, M. G. & Williams, M. A. J. (eds) *Monsoonal Australia: Landscape, Ecology and Man in the Northern Lowlands*, 794

Hoelzel, A. R. & Dover, G. A. *Molecular Genetic Ecology*, 397

Kirby, P. *A Review of the Scarce and Threatened Hemiptera of Great Britain*, 397

Kock, K.-H. *Antarctic Fish and Fisheries*, 596

Lunney, D. (ed.) *Conservation of Australia's Forest Fauna*, 795

Marzluff, J. M. & Balda R. P. *The Pinyon Jay: Behavioral Ecology of a Colonial and Cooperative Corvid*, 596

Pimm, S. L. *The Balance of Nature? Ecological Issues in the Conservation of Species and Communities*, 597

Sale P. F. (ed.) *The Ecology of Fishes on Coral Reefs*, 795

Stearne, S. C. *The Evolution of Life-histories*, 796

The Observer: an integrated software package for behavioural research, 218

Warham, J. *The Petrels: Their Ecology and Breeding Systems*, 797

Whitbread, A. M. & Kirby, K. J. *Summary of National Vegetation Classification Woodland Descriptions*, 398